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	the purchase of a three-	month European put	option on a nondivider	ıd paying stock. You are લ્	given the following	
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L-year Europea	an call option on a stock	:				
<ul> <li>The strike price is 74.</li> <li>The stock's current price is 79.</li> <li>The continuously compounded risk-free interest rate is 0.04.</li> <li>The stock pays a dividend of 4 every 3 months, starting immediately after the call option is written. The dividend at the end of one year is paid before the option may be exercised.</li> <li>The annual volatility of a prepaid forward on the stock is 0.32.</li> <li>The stock follows the Black-Scholes framework.</li> </ul>						
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	Tuesday, 28 I 11 secs  0 out of a ma e considering is ation:  The strike pric The current st The annual ris The current st The annual ris The strike pric The stri	Tuesday, 28 February 2023, 04:22 Pl 11 secs  0 out of a maximum of 10 (0%)  e considering the purchase of a three- ation:  The strike price is 75. The current stock price is 77. The annual risk-free interest rate is 88 The annual volatility of the stock is 26 The stock follows the Black-Scholes fr ate the price of the option.  r:  comment or override grade  ect at answer: 2.405 for this submission: 0/1.  e considering the purchase of a three- ation:  The strike price is 68. The current stock price is 76. The annual risk-free interest rate is 88 The annual volatility of the stock is 25 The stock follows the Black-Scholes fr ate the price of the option.  r:  comment or override grade  ect answer: 0.5919 for this submission: 0/1.  1-year European call option on a stock The strike price is 74. The stock pays a dividend of 4 every: The stock pays a dividend of	Tuesday, 28 February 2023, 04:22 PM Tuesday, 28 February 2023, 04:22 PM 11 secs  0 out of a maximum of 10 (0%)  e considering the purchase of a three-month European put ation:  The strike price is 75. The current stock price is 77. The annual risk-free interest rate is 8% compounded conting the annual volatility of the stock is 26%. The stock follows the Black-Scholes framework.  ate the price of the option.  r:  comment or override grade ect answer: 2.405 for this submission: 0/1.  e considering the purchase of a three-month European put ation: The strike price is 68. The current stock price is 76. The annual risk-free interest rate is 8% compounded conting the annual volatility of the stock is 25%. The stock follows the Black-Scholes framework.  ate the price of the option.  r:  comment or override grade ect answer: 0.5919 for this submission: 0/1.  L-year European call option on a stock: The strike price is 74. The stock pays a dividend of 4 every 3 months, starting im year is paid before the option may be exercised. The annual volatility of a prepaid forward on the stock is 0. The stock follows the Black-Scholes framework.  ate the price of the option.  The stock follows the Black-Scholes framework.  ate the price of the option.  The stock follows the Black-Scholes framework.  ate the price of the option.  comment or override grade ect the annual volatility of a prepaid forward on the stock is 0. The stock follows the Black-Scholes framework.  ate the price of the option.  comment or override grade ect the answer: 3.7022	Tuesday, 28 February 2023, 04:22 PM Tuesday, 28 February 2023, 04:22 PM 11 secs  0 out of a maximum of 10 (0%)  e considering the purchase of a three-month European put option on a nondivider ation:  The strike price is 75.  The current stock price is 77.  The annual risk-free interest rate is 8% compounded continuously.  The annual risk-free interest rate is 8% compounded continuously.  The stock follows the Black-Scholes framework.  ate the price of the option.  The stock price is 70.  The comment or override grade est answer: 2.405  for this submission: 0/1.  The strike price is 68.  The current stock price is 76.  The annual risk-free interest rate is 8% compounded continuously.  The annual volatility of the stock is 25%.  The stock follows the Black-Scholes framework.  ate the price of the option.  The stock follows the Black-Scholes framework.  ate the price of the option.  The stock surrent price is 74.  The stock's current price is 74.  The stock's current price is 79.  The continuously compounded of 4 every 3 months, starting immediately after the cal year is paid before the option may be exercised.  The stock so undaility of a prepaid forward on the stock is 0.32.  The stock follows the Black-Scholes framework.  ate the price of the option.  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nswer:		<b>□ x</b>
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	wer: 28.254 his submission: 0/1.	
€	Suppose that 9-month futures price for a certain stock is 47. The futures prices follows a geometri	
larks: 1	0.37. Consider a European call option on the future contract. The option expires 9 months from no that the risk-free interest rate is 0.024, calculate the price of the option	w and has a strike price of 47. Assume
	Answer:	X
	Make comment or override grade	
	Incorrect	
	Correct answer: 5.87175 Marks for this submission: 0/1.	
6 👺	Let S(t) denote the price at time-t of a stock that pays no dividends. The Black-Scholes framework	
1arks: 1	with exercise date T , T > 0, and exercise price $S(0)e^{rT}$ , where r is the continuously compounded	risk-free interest rate. You are given:
	<ul> <li>S(0)= 280</li> <li>T = 15</li> </ul>	
	• V[ln S(t)]=0.31t, t > 0.	
	Determine the price of the call option	
	Answer:	<u> </u>
		^
	Make comment or override grade Incorrect	
	Correct answer: 201.32	
	Marks for this submission: 0/1.	
7 🔡	You are given:	
Marks: 1	<ul> <li>The time-t price of a stock, S(t), where t is measured in years, follows the risk-neutral process.</li> </ul>	ess
	$d(\ln S(t)) = 0.035dt + 0.23d \sim Z(t)$	
	where $^{\sim}Z(t)$ is a standard Brownian motion is the risk-neutral measure. • $S(0) = 8.4$ .	
	The continuously compounded risk-free interest rate is 0.065.	
	An option pays max $(0, 44959.19 - S(1)^5)$ at the end of one year. Calculate the value of the option.	·
	Answer:	<u> </u>
	Make comment or override grade Incorrect	
	Correct answer: 9830.46	
	Marks for this submission: 0/1.	
8 🕏	For a stock that follows a geometric Brownian motion, you are given that	
Marks: 1	The current stock price is 28.	
	<ul> <li>The stock pays dividends continuously at a rate proportional to its price. The dividend yield</li> <li>The expected stock price after 1 year is 33.52.</li> </ul>	is 7%.
	<ul> <li>The variance of the stock price after 1 year is 184.68.</li> <li>The delta of a 1-year at-the-money European put option is -0.356268.</li> </ul>	
	Find the price of the put option	
	Answer:	
	Make comment or override grade	<del></del>
	Incorrect	
	Correct answer: 3.4667 Marks for this submission: 0/1.	
9 🕏	For a 1-month European put option, you are given:	
Marks: 1	• Theta is -0.0164 per day.	
	<ul><li>The underlying stock price is 57.</li><li>The strike price is 54.0.</li></ul>	
	<ul> <li>The stock's continuous dividend rate is 0.024.</li> <li>The continuously compounded risk-free annual interest rate is 0.075.</li> </ul>	
	Calculate theta per day for a 1-month European call option on the same stock with the same strike	e price
	, , ,	
	Answer:	
	Make comment or override grade	

Correct answer: -0.0237
Marks for this submission: 0/1.

10 👺	You are given the following information on two derivatives:							
Marks: 1		Derivative Price Delt	a Gamma Vega					
		A 1.1553 2.40	0.9232 Vega					
		B 0.3403 -0.8	513 -0.165 -0.05 Vega					
	You form derivative C by taking positions on derivative A and B. If derivative C has a zero delta and a gamma of 0.5, calculate its vega.							
	Answer:			<b>X</b>				
	Make comment or override grade							
	Incorrect							
	Correct answer: 0.2106							
	Marks for this submission: 0/1.							

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